



# STIC Search Report

## EIC 3700

STIC Database Tracking Number: 148225

**TO: Linda Sholl**  
**Location: RND 8a31**  
**Art Unit: 3700**  
**Monday, March 21, 2005**

**Case Serial Number: 10/608006**

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**Location: EIC 3700**  
**RND 8b31**  
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### Search Notes

No current or past litigation found involving US pat. 6329643.

Sources:

Lexis/Nexis  
Questel-Orbit

653460 (09) 6329643 December 11, 2001

Time of Request: March 18, 2005 12:57 PM EST

Research Information:

Utility, Design and Plant Patents  
patno=6329643

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

6329643

December 11, 2001

Method of temperature-calibrating heat treating apparatus

**REISSUE:** June 30, 2003 - Reissue Application filed Ex. Gp.: 3742; Re. S.N. 10/608,006 (O.G. October 7, 2003)

**APPL-NO:** 653460 (09)

**FILED-DATE:** August 31, 2000

**GRANTED-DATE:** December 11, 2001

**ASSIGNEE-AT-ISSUE:** Tokyo Electron Limited, Tokyo, Japan (JP), 03

**ASSIGNEE-AFTER-ISSUE:** August 31, 2000 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., TOKYO ELECTRON LIMITED 3-6 AKASAKA 5- CHOME, MINATO-KU TOKYO 107-8481 JAPAN, Reel and Frame Number: 11070/0262

**LEGAL-REP:** Oblon, Spivak, McClelland, Maier & Neustadt, P.C. - ##0

Selected file: PLUSPAT  
PLUSPAT - (c) Questel-Orbit, All Rights Reserved.  
Comprehensive Worldwide Patents database

**\*\* SS 2: Results 1**  
**PRT SS 2 MAX 1 LEGALALL**

1 / 1 PLUSPAT - ©QUESTEL-ORBIT

**Patent Number :**

US6329643 B1 20011211 [US6329643]

**Title :**

(B1) Method of temperature-calibrating heat treating apparatus

**Patent Assignee :**

(B1) TOKYO ELECTRON LTD (US)

**Patent Assignee :**

Tokyo Electron Limited, Tokyo [JP]

**Inventor(s) :**

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YASUHARA MOYURU (JP)

**Application Nbr :**

US65346000 20000831 [2000US-0653460]

**Priority Details :**

JP24891299 19990902 [1999JP-0248912]

**Intl Patent Class :**

(B1) F27D-003/12 H05B-001/02

**EPO ECLA Class :**

C30B-025/10

C30B-031/12

F27D-019/00

H01L-021/00S8A

H01L-021/00S8B

**US Patent Class :**

ORIGINAL (O) : 219497000; CROSS-REFERENCE (X) : 432241000

**Document Type :**

Basic

**Citations :**

US5001327; US5258601; US5273424; US5387557; US5500388; US5616264;

US5813851; US5875416; US6095806; US6222164; JP3-145121; JP5-267200

**Publication Stage :**

(B1) U.S. Patent (no pre-grant pub.) after Jan. 2, 2001

**Abstract :**

A second vertical heat treating apparatus is temperature-calibrated based on a heat treatment result obtained by a first vertical heat treating apparatus for reference. First, temperature measurement wafers is heated in the first apparatus to obtain set values of temperature controllers for a target value of temperature. Then, wafers are subjected to an oxidizing process in the first apparatus by using these set values to form an oxide film. The thickness of the oxide film is measured and recorded as a reference film thickness. Then, wafers are subjected to an oxidizing process in a second apparatus at temperatures near the target value to form an oxide film. The thickness of the oxide film is measured, and difference in thickness between the oxide film formed in the second apparatus and the reference film thickness is obtained. The oxidizing process in the second apparatus is repeated to obtain set values of temperature controllers for the second apparatus at the time when the difference in film thickness becomes zero. The second apparatus is temperature-calibrated on the basis of the set value thus obtained.

**Update Code :**

2001-51

1 / 1 LGST - ©EPO

**Patent Number :**

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**Application Number :**

US65346000 20000831 [2000US-0653460]

**Action Taken :**

20000831 US/AS-A

ASSIGNMENT

OWNER: TOKYO ELECTRON LIMITED 3-6 AKASAKA 5-CHOME, MINATO; EFFECTIVE  
DATE: 20000809

ASSIGNMENT OF ASSIGNORS INTEREST;ASSIGNORS:SUZUKI, FUJIO;SAKAMOTO,  
KOICHI;WANG, WENLING;AND OTHERS;REEL/FRAME:011070/0262

20031007 US/RF-A

REISSUE APPLICATION FILED

EFFECTIVE DATE: 20030630

**Update Code :**

2004-30

1 / 1 CRXX - ©CLAIMS/RRX

**Patent Number :**

6,329,643 A 20011211 [US6329643]

**Patent Assignee :**

Tokyo Electron Ltd JP

**Actions :**

20030630 REISSUE REQUESTED

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EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3742

Reissue Patent Number:

Session finished: 18 MAR 2005 Time 20:05:29

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